

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION

**JEFFREY GADDY,**

**Plaintiff,**

**v.**

**1:14-cv-1928-WSD**

**AMERICAN INTERSTATE  
INSURANCE COMPANY,**

**Intervenor Plaintiff,**

**v.**

**TEREX CORPORATION, TEREX  
SOUTH DAKOTA, INC., and  
TEREX UTILITIES, INC.,**

**Defendants.**

**OPINION AND ORDER**

This matter is before the Court on Defendants Terex Corporation, Terex Utilities, Inc., and Terex South Dakota, Inc.’s (“Terex SD”) (collectively, “Defendants” or “Terex”) Motion *In Limine* No. 1 To Exclude or Limit Evidence of Cracking In Other Terex XTs [410] (the “Motion”).

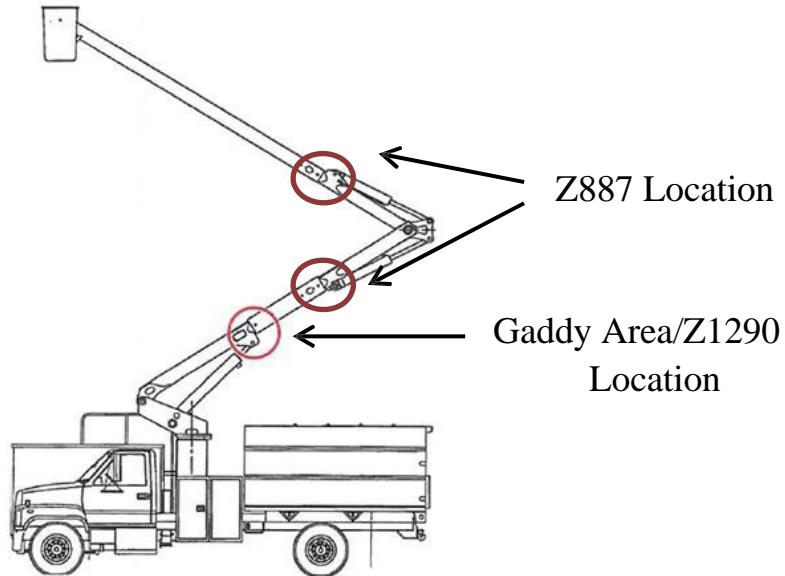
**I. BACKGROUND**

This is a product liability action arising from the April 9, 2014, failure of a 2002 Terex Hi-Ranger XT 60/70 boom, Serial No. 2021020554 (“Subject Boom”). ([410] at 2). The accident occurred when the lower section of the Subject Boom

cracked, which caused the bucket, with Plaintiff inside, to fall to the ground. (Id.).

The Subject Boom was part of Terex SD's XT aerial device line, which consisted of XT 52, XT 55, XT 58, and XT 60 aerial lifts. (Id.). The number following the XT designation represents the maximum height that the bucket platform can reach when fully extended. (Id.). The Subject Truck, an XT 60, was originally designed in 1999 (the "Original Design"). (Id.). Later, certain fix kits and modifications were made to allegedly improve the quality and safety of the XT line. (Id.).

Defendants assert that, in March 2004, the design of the XT series was revised in multiple locations to enhance the design and limit the areas of stress concentration on the boom. (Id.). Terex SD also implemented a field kit to repair reported cracking in the upper boom of pre-2004 machines ("Z887 Location"). (Id.). In November 2013, Terex SD developed a field kit to repair reported cracking in the lower boom of pre-2004 machines—the same area of the Subject Boom that fractured in Plaintiff's case (the "Z1290 Location"). A diagram illustrating the Z1290 Location and Z887 Location is below:



Defendants assert in the Motion that they anticipate Plaintiff will at trial attempt to introduce a list of alleged cracking incidents in XT machines, including alleged cracking incidents at the Z887 and Z1290 Locations. ([410] at 3). Defendants argue that Plaintiff should be precluded from introducing evidence or arguments regarding those cracking incidents where (1) there is an unknown serial number; (2) the crack occurred at the Z887 Location or where it is unknown whether the cracking occurred at the Z887 or Z1290 Locations; and (3) the crack occurred after the date of Plaintiff's accident. (Id. at 7). On August 7, 2017, Plaintiffs filed their Response to Terex Defendants' Motion *In Limine* to Exclude or Limit Evidence of Cracking in Other Terex XTs [432] ("Response"). Plaintiff argues that the Motion should be denied in its entirety because the evidence of

cracking shows that Defendants “under-designed its XT booms and [were] well aware of those design defects.” ([432] at 3).

## II. DISCUSSION

### A. Legal Standard

The “substantial similarity doctrine” is implicated where a party seeks to admit evidence of prior accidents or injuries caused by the same event or condition to prove the existence of a dangerous condition, that the defendant had knowledge of the dangerous condition, or that the dangerous condition was the cause of the present injury. Custer v. Terex Corp., No. 4:02-cv-38-HLM, 2005 WL 5974434, at \*13 (N.D. Ga. May 17, 2005) (citing Heath v. Suzuki Motor Corp., 126 F.3d 1391, 1396 (11th Cir. 1997). ““This doctrine applies to protect parties against the admission of unfairly prejudicial evidence, evidence which, because it is not substantially similar to the accident or incident at issue, is apt to confuse or mislead the jury.”” Id. Where such evidence is admitted, it may be offered to show a ““defendant’s notice of a particular defect or danger, the magnitude of the defect or danger involved, the defendant’s ability to correct a known defect, the lack of safety for intended uses, the strength of a product, the standard of care, and causation.”” Reid v. BMW of North America, 464 F. Supp. 2d 1267, 1271 (N.D.

Ga. 2006) (quoting Hessen v. Jaguar Cars, Inc., 915 F.2d 641, 650 (11th Cir. 1990)).

The doctrine, however, is subject to a number of limitations. That is, “[b]ecause of the potential impact that evidence of similar accidents can have on juries, [the Eleventh Circuit] has placed two additional limitations on the use of such evidence: (1) the prior failure(s) must have occurred under conditions substantially similar to those existing during the failure in question, and (2) the prior failure(s) must have occurred at a time that is not too remote from the time of the failure in question.” Weeks v. Remington Arms Co., 733 F.2d 1485, 1491 (11th Cir. 1984); see also Neagle v. Illinois Tool Works, Inc., No. 1:08-cv-2080-WSD, 2011 WL 13173913, at \*4 (N.D. Ga. Feb. 11, 2011) (holding prior incidents involving dissimilar injuries and different gun models did not meet substantial similarity threshold); Reid, 464 F. Supp. at 1271-72 (finding substantially similar prior incidents involving failure at same location of same part of same model of automobile that caused plaintiff’s injury). “Conclusory statements of alleged similarity are not enough.” Gibson v. Ford Motor Co., 510 F. Supp. 2d 1116, 1120 (N.D. Ga. 2007).

## B. Analysis

Defendants first argue that evidence of cracking in machines with unknown serial numbers should be excluded because Plaintiff cannot demonstrate whether these machines were an Original Design or a post-2004 design.<sup>1</sup> ([410] at 7). Defendants contend that it is undisputed that Terex SD redesigned the XT line in March 2004 “such that XTs that were manufactured after March 2004 cannot be substantially similar” to the Subject Boom, which is an Original Design vehicle. (*Id.*). Defendants further argue that it is “impossible” to identify whether XTs with unknown serial numbers were of an Original Design or were manufactured following the redesign, Plaintiff cannot meet his burden of showing substantial similarity in cracking incidents for machines with no identifiable serial number. (*Id.*). Plaintiff contends, on the other hand, that he can demonstrate those machines with unknown serial numbers are in fact Original Design XTs based on evidence presented in the form of photographs, customer complaints and emails, service orders, and deposition testimony. ([432] at 23). Plaintiff concludes that “[b]ecause [he] has other trustworthy sources of evidence” showing that the cracking instances relate to Original Design booms, those instances of cracking are relevant and admissible. (*Id.* at 24).

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<sup>1</sup> The first three numbers of the serial number identify the date that the machine was manufactured. ([410] at 7).

Having reviewed the record and Plaintiff's assurances that it will for each other boom crack it seeks to introduce demonstrate the conditions and circumstances surrounding the cracking, the Court will not now exclude similar cracking in Original Design booms simply because a machine lacks a serial number. The record evidence, including the photographs, emails, complaints, and service orders referenced in Plaintiff's Response, may be used to substantiate that these machines are pre-March 2004, Original Design machines. ([433.5-9]). For example, Plaintiff's Exhibit N is an email with a number of photographs attached. ([433.6]).<sup>2</sup> The "Attachm ents" line states: "2003 Cracked Boom 001.jpg; 2003 Cracked Boom 002.jpg; 2003 Cracked Boom 003.jpg; 2003 Cracked Boom 004.jpg; 2003 Cracked Boom 005.jpg; 2003 Cracked Boom 006.jpg." (Id. at 1).<sup>3</sup>

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<sup>2</sup> On the other hand, Plaintiff's Exhibit M, an August 14, 2007, customer complaint, states:

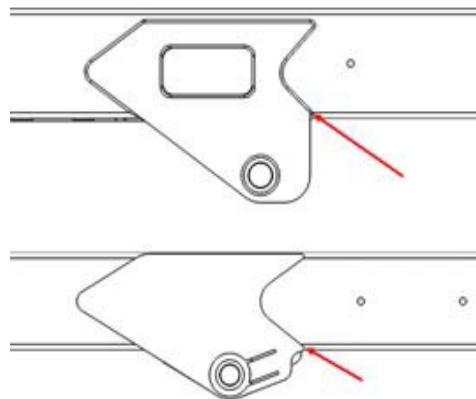
This is a picture of an 1999 XT where the lower boom cylinder bracket attached to the lower boom on the bottom passenger side, it is hard to tell if the metal along side [sic] the weld is cracking or if the paint is [sic] just came off and is making it look like a crack. I looked at 2 other XT's of the same year and they all look similar to this one. Is this a common problem and if so how can I tell if it is a crack or not? And if it is a crack what is the proper way to fix this?

([433.5] at 1). Without evidence that there is a crack as opposed to a paint problem, this evidence is not admissible.

<sup>3</sup> If Defendants believe Plaintiff has not presented evidence to establish a boom as one of an Original Design, they may object at trial.

Defendants also argue that each alleged cracking incident in the Z887 Location, or in a location that cannot be ascertained by Plaintiff, should be excluded. ([410] at 8). Defendants argue that “the design of the Z887 Location is not at issue [in] this case and has nothing to do with why or how the Subject Boom Truck failed.” (Id.). Defendants further contend that not only is the Z887 Location a “separate place on the boom than what failed on April 9, 2014,” but Plaintiff “has failed to gather sufficient evidence comparing the Z887 Location” to the area the Z1290 Location that failed and resulted in Plaintiff’s injuries. (Id.). Defendants even submit an affidavit attesting to the fact that the design of the Z887 Location, and how loads are transferred at such location, is entirely “distinct” from the Z1290 Location. (See Affidavit of Jim Olson [410.2] ¶ 5).

Plaintiff argues that the Z1290 and the Z887 Locations are similarly designed. Specifically, Plaintiff contends that the side lift plates share the same “v” shape design, which resulted in stress concentrations to be increased to “dangerous levels” and cracking in the “exact same area[.]” ([432] at 15). In other words, the design of the lift plates is defective in the same way, “thus channeling stress into a specific area in identical ways.” (Id. at 20). The plates are designed as follows:



Plaintiff argues further that Terex's engineering expert, Jim Olson, conceded the Z887 Location is similarly designed. (May 13, 2015 Deposition of Jim Olson [432.1] at 32). Plaintiff asserts that "the areas are so similarly designed that when Terex initiated testing in January 2004[,] in response to reports of cracking in the Z887 [Location], Terex also tested the Z1290 [Location] area for the same issue." ([432] at 19). Plaintiff also points to the fact that the same repair kit created for Z887 Location was used to address cracking in the Z1290 Location. (Id.).

Plaintiff points to the testimony of Defendants' own witness, Jim Olson, a product safety engineer for Terex SD, who stated in his May 13, 2015, deposition the following:

A: We did that area along with primarily the elbow cylinder area (Z887 Location), which is the area in this area. That is the reason that we started testing, because of reports of cracks in that area. And the lower boom was also tested at the lower boom sub area at the same time.

Q: It was tested because it has a design similar to the other areas that were cracking further up the boom; correct?

A: It has a design similar, yes.

(See [432.1] at 32).

The Eleventh Circuit, in design defect cases, has cautioned that prior failures a plaintiff seeks to introduce as probative regarding the failure at issue in a case, must have occurred under conditions substantially similar to those existing during the failure and that the prior failures must have occurred at a time that is not too remote from the time of the failure in question. Weeks, 733 F.2d at 1491. For example, in Hessen, the Eleventh Circuit found that the district court properly admitted evidence of similar defects where the plaintiff could show that the defect alleged in the plaintiff's product was the same as the defect involved in the recall. Hessen, 915 F.2d at 650. Similarly, in Reid, the court allowed the plaintiff to introduce evidence of prior, similar occurrences of a failed upper radiator neck in BMW vehicles of the same series spanning approximately ten years. Reid, 464 F. Supp. at 1271-72. All of the occurrences involved similar conditions, including that the vehicle was overheating when the radiator neck broke off and that the radiator plastic appeared brittle. Id. at 1272.

Plaintiff argues that evidence of similarity in design of two locations on the boom and a similar repair kit to fix cracks at both locations meets the substantial

similarity test. The Court disagrees. The substantial similarity requirement allows for the introduction of similar acts to support the act at issue in a trial where there is evidence that a failure occurred as the result of the same circumstances—in this case, similar use, forces, and conditions. It is this substantial similarity that allows a jury to be presented with evidence that prior failures were similar enough to deduce a failure occurred under the conditions that occurred in the comparable case. There has not been a sufficient showing here that any failures at the Z887 Location were the result of substantially similar conditions as the failure at the Z1290 Location at issue in this case, or that the failures occurred at a similar time and as a result of similar forces and stresses.

Defendants contend finally that any evidence of the number of repair kits sold for the Z887 and Z1290 Locations should be excluded because this evidence “does not even remotely meet the substantial similarity test.” ([410] at 15). That is, Defendants argue that Plaintiff does not and cannot identify who purchased each repair kit, when each sale was made, the model or year of the machine that each kit applied to, or whether the repair kit was even used or applied to the machine. Plaintiff responds that the “number of repair kits for both Z887 [Locations] and Z1290 [Locations] are highly probative of Terex’s notice that the XT booms had a propensity to crack and, thus, are reviewed under a relaxed standard.” ([432] at

27-28). In other words, “[t]here is only one purpose for which any customer could want such a kit, identical cracking due to an identical defect in either an identical (Z1290) or similarly designed (Z887) area.” Plaintiff states further that the record shows that Terex was selling Z887 Location report kits for cracks in the Z1290 Location, which “not only demonstrates the similarities of the two areas but serves as a proxy for other instances of cracking in either area.”<sup>4</sup> ([432] at 28).

The Court does not find evidence of the sale of repair kits admissible. That Terex was selling repair kits does not show that the kits were to repair cracks or were merely to have a repair kit in the event that a crack occurred. It also does not show that the kits were for repairs that are sufficiently similar to the boom in this case to show it had probative value.

### **III. CONCLUSION**

For the foregoing reasons,

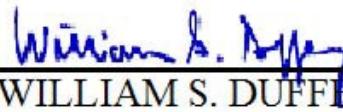
**IT IS HEREBY ORDERED** that Defendants Terex Corporation, Terex Utilities, Inc., and Terex South Dakota, Inc.’s Motion *In Limine* No. 1 To Exclude or Limit Evidence of Cracking In Other Terex XTs [410] is **GRANTED IN PART** and **DENIED IN PART**. It is **GRANTED** with respect to (1) incidents involving

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<sup>4</sup> The decision to use a similar repair kit does not show it addressed the same failure cause. The offer and use of a similar repair method could be for a number of reasons, such as ease of implementation, cost, and convenience to the customer.

the Z887 Location or where it is unclear where the crack occurred and (2) sales of repair kits. It is **DENIED** with respect to incidents where the serial number is unknown.<sup>5</sup>

**SO ORDERED** this 30th day of March, 2018.

  
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WILLIAM S. DUFFEY, JR.  
UNITED STATES DISTRICT JUDGE

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<sup>5</sup> Admissibility of this evidence is, as noted above, subject to the “substantial similarity” legal standard articulated in this Order. Defendants may reiterate their objection to this evidence at trial.